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ABSTRACT

This study, part of a larger longitudinal study on school-to-home communications and parent involvement, examined the relationship between teachers' school-to-home communications and parental perceptions and beliefs, parental involvement, and children's motivation-related outcomes. The teacher sample included 14 second-grade and 11 fourth-grade teachers who volunteered to engage in three categories of school-to-home communications: (1) provide parents with information about classroom work and practices, (2) provide parents with information about their own child's work and progress, and (3) provide parents with assistance in working with their child on schoolwork at home. The children in these teachers' classrooms made up the child sample, and the parent sample consisted of parents of all children in each classroom. The findings of the study suggest that the frequency and content of school-to-home communications are important. When these communications contain information that may influence parents' perceptions of their child as a learner, when they give parents a sense of efficacy, and when they make the parent feel comfortable with the school, parent involvement may be enhanced. (Author)

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CENTER ON FAMILIES, COMMUNITIES, SCHOOLS & CHILDREN'S LEARNING

PARENT INVOLVEMENT

The Relationship Between School-to-Home Communication and Parents' Perceptions and Beliefs

Carole Ames
with
Madhab Khoju
Thomas Watkins

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PARENT INVOLVEMENT

The Relationship Between School-to-Home Communication

And Parents' Perceptions and Beliefs

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with

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Report No. 15

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CENTER ON FAMILIES, COMMUNITIES, SCHOOLS & CHILDREN'S LEARNING

The nation's schools must do more to improve the education of all children, but schools cannot do this alone. More will be accomplished if families and communities work with children, with each other, and with schools to promote successful students.

The mission of this Center is to conduct research, evaluations, policy analyses, and dissemination to produce new and useful knowledge about how families, schools, and communities influence student motivation, learning, and development. A second important goal is to improve the connections between and among these major social institutions.

Two research programs guide the Center's work: the Program on the Early Years of Childhood, covering children aged 0-10 through the elementary grades; and the Program on the Years of Early and Late Adolescence, covering youngsters aged 11-19 through the middle and high school grades.

Research on family, school, and community connections must be conducted to understand more about all children and all families, not just those who are economically and educationally advantaged or already connected to school and community resources. The Center's projects pay particular attention to the diversity of family cultures and backgrounds and to the diversity in family, school, and community practices that support families in helping children succeed across the years of childhood and adolescence. Projects also examine policies at the federal, state, and local levels that produce effective partnerships.

A third program of Institutional Activities includes a wide range of dissemination projects to extend the Center's national leadership. The Center's work will yield new information, practices, and policies to promote partnerships among families, communities, and schools to benefit children's learning.

Abstract

This study, part of a larger longitudinal study on school-to-home communications and parent involvement, examined the relationship between teachers' school-to-home communications and parental perceptions and beliefs, parental involvement, and children's motivation-related outcomes. The teacher sample included 14 second-grade and 11 fourth-grade teachers who volunteered to engage in three categories of school-to-home communications: (1) provide parents with information about classroom work and practices, (2) provide parents with information about their own child's work and progress, and (3) provide parents with assistance in working with their child on schoolwork at home. The children in these teachers' classrooms made up the child sample, and the parent sample consisted of parents of all children in each classroom. The findings of the study suggest that the frequency and content of school-to-home communications are important. When these communications contain information that may influence parents' perceptions of their child as a learner, when they give parents a sense of efficacy, and when they make the parent feel comfortable with the school, parent involvement may be enhanced.

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Introduction

In an attempt to address the chronic underachievement of American school children, recent educational reforms have begun to focus on establishing better connections between the school and home, more specifically, increasing parental involvement in children's learning (Coleman, 1987; Comer, 1986, 1988; Walberg, 1984a, 1984b). This trend is bolstered by an emerging body of evidence documenting the positive contributions to children's achievement when schools extend their influence by reaching out to parents and involving them (e.g., Epstein, 1986, 1990; Epstein & Dauber, 1991). This "connectedness" between school and home, however, involves more than mere frequency of contact. A broad base of literature suggests, quite clearly, that it is the quality of the school and home relationship that provides the impetus for parents to become involved.

Parent involvement has been defined in a number of ways including, for example, participation in school governance issues, volunteering at the school building, assisting children in their schoolwork at home, and participation in parent-teacher associations. Parents, however, can be involved with their children's learning in other ways that have important consequences for how children approach and engage in learning. For example, parents convey expectations, achievement standards, and attitudes by how they talk to their child about school, monitor their child's schoolwork, review tests and assignments with the child, interpret report card information, and provide encouragement and support. These are family-based processes, and the recent literature (Epstein, 1990; Grolnick, Ryan, & Deci, 1991) suggests that these processes can be shaped and influenced by how schools relate and connect to parents. Teachers' communication practices, especially the content and frequency of them, may be one factor that influences whether and how these processes become manifest at home. Although substantial evidence underscores the general value of teachers involving parents, there remains much to be learned about how specific types of parent involvement practices influence parent involvement processes (see Epstein, 1986, 1990).

Prior research has shown that parental involvement is related to family characteristics such as educational background and income or SES (Baker & Stevenson, 1986; Coleman, 1987; Keith, 1982; Lareau, 1987). Involvement tends to be higher among parents with higher income and education. At the same time, however, there is clear evidence to suggest that teachers' actions and practices may be more predictive of whether or not parents become involved than are these status variables (e.g., Becker & Epstein, 1982; Epstein, 1986, 1990; Epstein & Dauber, 1991). In the present study, we focused on one type of teacher-based practice -- teachers' use of school-to-home communications. It was the general intent of this

study to examine how teachers' school-to-home communication practices influence parent involvement processes.

Parent involvement may also be related to certain beliefs and perceptions. For example, parents' perceptions of the school, their child's teacher, and their child as well as beliefs about their own ability to make a difference in their child's learning (Becker & Epstein, 1982; Epstein, 1986, 1990) may be important determinants of how parents interact with their child and become involved in their child's learning. Whereas children's efficacy-based beliefs have been found to predict a wide range of engagement-related behaviors in children (e.g. Schunk, 1989), parents' willingness to become involved and engaged may depend on beliefs about their own ability to influence their child's success. Similarly, parents may be more likely to become involved when they feel comfortable with their child's school and have confidence in their child's teacher. Additionally, parents may be more likely to invest in their child's learning when they perceive their child as willing to learn. In this study, we addressed how teachers' communication practices that are intended to involve parents affect parental beliefs and perceptions, and their resulting involvement.

Although parent involvement has been linked to children's academic achievement in school (Epstein, 1990; Coleman, 1987; Lareau, 1987), other potential outcomes of parent involvement such as children's motivation and interest in learning have not received much attention. Parent involvement may also serve to increase children's confidence in their abilities and interest in learning. These motivation-related variables are quite important since children can develop maladaptive beliefs and motivation patterns that contribute to underachievement in the early elementary school years (e.g., Carr, Borkowski & Maxwell, 1991; Oka & Paris, 1987). Parental beliefs and perceptions may contribute to how children approach learning (see Ames & Archer, 1987; Grolnick & Ryan, 1989; Grolnick, Ryan, & Deci, 1991; Stevenson & Baker, 1987). For example, parents' knowledge of classroom learning and instructional programs, perceptions of their child's ability and motivation, and beliefs about their own sense of efficacy may be important precursors to a wide range of parenting strategies including, for example, how parents talk to their child about school, monitor their child's progress, and support their child's learning. Walberg (1984a) suggests that process variables such as these may indeed form the "curriculum" of the home, having important long-term consequences for children's motivation and "receptiveness" to school learning.

Overview of Study

In this study, we focused on one type of parent involvement practice -- school-to-home communication. In describing different types of parent involvement practices used by schools, Epstein (1986, 1990) suggests that while school-to-home

communications may serve to increase parental participation and interaction with the child, these communications occur infrequently. Moreover, when they do occur, the communications often carry negative content, convey little classroom-related instructional information, and fail to establish a meaningful connection between the classroom teacher and parent. If appropriately structured, these school-to-home communications could impart information to help parents become more knowledgeable about children's learning activities, aware of their child's positive qualities and progress, and informed about how they, as parents, might help their child learn. When school-to-home communications involve instructionally-meaningful and personally-relevant information, they may serve to create "knowledgeable partners" in parents, give parents confidence in the school, establish positive beliefs about their child as a learner, and foster an interest in their child's learning and progress (see Epstein, 1986, 1990).

The prevalence of parent involvement practices varies considerably among teachers within any single school. Recent findings by Epstein and Dauber (1991) suggest that use of school-to-home communications as a practice may depend on the attitudes and preferences of the individual classroom teacher. Consequently, we focused on the classroom teacher as the source or initiator of school-to-home communications. Further, because the content of these communications was of central importance, we identified three categories of school-to-home communications that ought to influence parent involvement processes (see also Ames, 1992). These categories included (1) information to parents about classroom learning activities, (2) information to parents about their child's accomplishments, progress, and improvement, and (3) information designed to help parents assist in their child's learning at home.

In prior research, teachers' practices of parent involvement and the level of parent involvement, itself, has often been assessed from the perspective of the teacher. When teachers are asked to rate the degree of parental involvement, however, their judgments may be influenced by their perceptions of the child's achievement and classroom behavior (see, for discussion, Epstein & Becker, 1982; Reynolds, 1991; Stevenson & Baker, 1987). As a result, teachers may attribute greater involvement to the parents of those children who do well in school; their reports, therefore, may reflect certain biases. As well, teachers' reports of their own practices tell us little about how parents receive or view the teachers' practices. The impact of teachers' communications on parental involvement may well depend on whether parents actually receive and attend to the communications and how parents interpret and give meaning to the content of the communications. As a consequence, parents' reports may provide a more accurate assessment of their awareness and evaluation of the communications.

Some research suggests that parents' understanding of school programs, confidence in their child's teacher, and involvement with their child's learning are

related to whether parents feel their child's teacher actively seeks to involve them (Ames, Tanaka, Khoju, & Watkins, 1993; Becker & Epstein, 1982; Epstein, 1986). The present study builds on this earlier work by examining parents' beliefs and perceptions that may mediate the impact of teachers' communication practices on parent involvement. School-to-home communications, when they receive the attention of parents, were expected to relate to parents' feelings of "connectedness" with the school, their perceptions of their child as a learner, their own efficacy beliefs, and hence, their reported involvement with their child's learning. We examined the relationship between teachers' school-to-home communications and parental perceptions and beliefs, parental involvement, and children's motivation-related outcomes. This research is part of a larger longitudinal study on school-to-home communications and parent involvement, and this article reports the approach and findings from the first year.

Method

Sample

The teacher sample included 14 second-grade and 11 fourth-grade teachers. These teachers volunteered to participate in a parent involvement project that focused especially on school-to-home communications. A sample of eight second-grade and seven fourth-grade teachers served as the control group. These schools were drawn from three midwestern school districts in cities and rural areas. Two districts were heterogeneous with respect to ethnicity (47% & 34% ethnic representation) and SES (62% & 25% children eligible for free lunch). The third district was more rural in composition and had only 2% ethnic representation and 14% of the children eligible for free lunch program. The districts were located in midwestern cities and the adjacent rural areas. The parent sample consisted of parents of all children in each classroom.

Intervention

Teachers participating in the parent involvement intervention group were provided with materials that defined the purposes and scope of the three categories of school-to-home communications and that identified strategies and practices relevant to each category. The three categories were described as follows: (1) provide parents with information about classroom learning activities, goals, plans, curriculum, and materials; (2) provide parents with information about their own child's progress, accomplishments, improvement and effort at school; and (3) provide parents with information, structure, and direction that will enable them to help or work with their child on learning activities at home. These categories and descriptions were derived from previous research (Ames, 1992) and are described in Table 1. Examples of strategies (newsletters, phone calls, personal notes, review activities, and work

folders) and actual content-relevant information were provided for each strategy. Teachers were given sample formats and guidelines for using each strategy.

Insert Table 1 about here

The frequency as well as the content of school-to-home communications was manipulated according to the following guidelines: teachers were to communicate with the parent(s) of each child in their room at least once each week using any one of the strategies. Teachers were also instructed to use all three categories of communications at least once each semester. They kept weekly records describing the specific strategy (e.g., newsletter, personal notes, phone calls), and these record-keeping forms were collected and monitored on a monthly basis. A final end-of-year review of the record-keeping forms showed that eight teachers (four second & four fourth) failed to use any communications across several months so they were subsequently dropped from the analyses. Teachers participating in the intervention group received compensation for their participation in the form of either a \$100 stipend or board credit from their school district. The teachers serving as the control group received no special training or instruction.

Teacher Measures

At the end of the school year, teachers in both the intervention and control groups were asked to rate their frequency of use (on a five-point scale) of eight school-to-home communication practices. These practices included: (1) classroom newsletters about students' learning, (2) information about classroom activities and instructional plans, (3) reports or notes on children's progress, (4) ideas for parents to help children learn, (5) notes about accomplishments and improvements, (6) folders of classwork with comments, (7) activities for parent and child to do together, and (8) invitations to participate in classroom activities. These items were also combined to form an overall measure of teacher's school-to-home communication practices.

Teachers were also asked to rate their sense of efficacy across four items (using a five-point scale). The items were: "If I try really hard, I can get through to the most difficult student. Some students are not going to make progress no matter what I do (reversed scored). Compared to previous years, my class this year was more difficult to work with (reverse scored). I feel I have a lot of ideas about how to get my students interested and involved in learning." The first item was adapted from the Teacher Efficacy Scale of Midgley, Feldlaufer & Eccles (1989; see also Armor et al., 1976; Berman et al., 1977; Gibson & Dembo, 1984). The coefficient alpha representing the internal consistency for this scale was .56.

Parent Measures

Surveys were sent to parents of all children at the end of the school year. The surveys were carried home by the children and returned in sealed envelopes to the school. The mother or primary caretaker of the child was asked to complete the survey. The response format was the same across all items on the survey, asking parents to respond on a five-point scale, generally indicating level of agreement (strongly agree to strongly disagree) or frequency or amount (a great deal to not at all). The return rate for parent questionnaires was 78% (second grade) and 91% (fourth grade) for the intervention group and 82% (second grade) and 56% (fourth grade) for the control group.

A scale assessing parents' awareness of the frequency and quality of the teachers' communication practices included eight items (e.g., "This teacher really kept me informed about what my child was learning....gave me frequent reports about my child's progress....often told me about my child's strengths and positive qualities....gave me ideas about how to help my child learn."). The coefficient alpha representing internal consistency for this sample was .93.

Parents' evaluation of the teachers' effectiveness was assessed with eight items (e.g., "This teacher really got my child interested in learning....really encouraged my child....improved my child's abilities in school....made my child feel good about learning"). These items were combined into a single scale for which the coefficient alpha was .95.

Parents' perceptions of their child's motivation was measured with four items ("My child feels pretty good about schoolwork....likes to try new things even if they are hard....likes to learn new things....works hard in school.") which were combined into a single scale. The coefficient alpha for this scale was .85.

Parents' self-reported involvement included three items ("How often do you talk to your child about what he/she is learning in school? How much time do you spend working with your child on school subjects each day? How often do you review and discuss with your child the school work he/she brings home?") which were combined into a single scale for which the coefficient alpha was .65.

Parents' comfort with the school ("How comfortable do you feel at your child's school?"), and sense of efficacy ("How much influence do you think you can have on your child's success in school?") were single item assessments.

Child Measures

Children's motivation to learn included self-report measures of their interest in learning and academic self-competence. A scale assessing intrinsic interest contained seven items (e.g., "I like doing my classwork. I like learning new things. I work hard to learn new things."). Some items were adapted from Gottfried (1985). The coefficient alpha for this sample was .72. A measure of perceived competence included five items ("I am pretty good at my schoolwork. I remember things easily. I am just as smart as other kids my age. I can do the work in my class. We do many things in school that I can do well.") which were adapted from items on Harter's Perceived Competence Scale (1982). The coefficient alpha for this scale for this sample was .70. Children's perceptions of their parent's involvement was assessed with six items (e.g., "My parents tell me when I do a good job. My parents ask me questions about what I'm learning in school. My parents talk about papers I bring home "). Coefficient alpha for this latter scale was .76.

Results

Did the intervention make a difference in teachers' use of school-to-home communications?

The first set of analyses compared the self-reports of teachers who were in the intervention group with those in the control group. A Grade Level x Group (Intervention vs. Control) ANOVA was conducted for each communication practice separately and for a combined score. Table 2 shows the means of the intervention and control groups and the resulting *F* values from the ANOVA. The intervention group teachers reported significantly greater use of communications that involved sending newsletters and providing information about classroom activities than did the teachers in the control group. In addition, there was a significant effect for the combined score on communication practices favoring the intervention group teachers. There were no significant interaction effects and only one grade level effect, which indicated that fourth grade teachers sent home folders of children's classwork more often than second grade teachers, $F(1,30)=6.48, p<.05$.

Insert Table 2 about here

Although the teachers' reports suggested that the intervention teachers used some communication practices aimed at parent involvement more than did the control teachers, these differences were not corroborated by parents' reports. Table 3 shows that when data were aggregated to the classroom level, there were no significant

differences between the parents in the intervention and control groups on any of the communication practices. In addition, there were no significant grade level or interaction effects on any item.

Insert Table 3 about here

Of considerable concern was the apparent lack of consistency between the teachers' self-report of their communications and parents' reports of the same. This discrepancy may reflect, in part, the different construction of the teacher and parent questionnaires. Whereas teachers rated the frequency of specific practices, parents were asked to rate their attitudes toward the teachers' communication practices (e.g., "this teacher really kept me informed....") as well as the perceived frequency of some communications (e.g. "gave me frequent reports about my child's progress."). The parents' ratings also showed that they were generally positive toward their child's teacher. Those parents who were less positive may have been reluctant to return a questionnaire that judged the teacher in an unfavorable manner. The return rate for questionnaires was, in fact, quite discrepant between the intervention and control classrooms at the fourth grade level. Whereas 91% of the fourth grade parents in the intervention group returned the questionnaire, only 56% of those in the control group returned the survey. The sizeable percentage of fourth grade parents in the control group who did not return a questionnaire may have been part of this less favorable group.

The data also showed considerable variance among teachers' reports within both the intervention and control groups. Some teachers in the intervention group reported little use of communications and some teachers in the control group reported very high use of communication practices. The range of scores on the teacher scale (combined score with a possible range of 8-40) was 19-30 within the intervention group and 17-33 within the control group. The variability in teachers' self-report within both groups suggested that the potential relationship between teachers' communication practices and parental beliefs and perceptions may need to be examined in a different manner. As a consequence, we decided to identify those teachers who, by their own self-reports, were the highest versus lowest users of the targeted parent-involving communication practices and to compare these teachers using analytical procedures.

What differences were found between those teachers who were high versus those who were low users of school-to-home communications?

Using the combined score for teachers' reports of communication practices, we identified five teachers at each grade level who were the highest and lowest users of

school-to-home communications. Then, Grade Level (2 & 4) x Use (High vs. Low Use of Communication Practices) ANOVAs were used to compare teachers' reports on their use of communications to involve parents. As would be expected based on our overall selection procedure, teachers reporting high versus low use of communications to parents differed significantly on each type of communication strategy (see Table 4). One significant grade level effect showed that fourth grade teachers ($M=3.70$) sent home folders of children's classwork more often than second grade teachers ($M=2.60$), $F(1,18)=5.63$, $p<.05$. In addition to use of communication practices, we also found that teachers who were high users of communications reported higher teaching efficacy than teachers who were low users of communications to parents ($M_s = 16.40$ & 12.80 , respectively, $F(1,18)=11.89$, $p<.01$).

Insert Table 4 about here

Of particular interest were the findings from the Grade x Level of Use ANOVAs which were then performed on measures of parents' beliefs and perceptions. For these analyses, the parent data were aggregated to the classroom level, and the class mean was treated as the unit of analysis. Table 5 shows that teachers' reported use of communications was significantly related to parents' awareness of or attention to these communications. Parents reported receiving more communications when their child was in a classroom where the teacher self-reported high, rather than low, use of communication strategies ($p<.01$). Parents also evaluated teachers who were high users of communication practices as more effective than those who were low users ($p<.01$). In addition, parents' beliefs about their ability to influence their child were higher ($p<.05$), they viewed their child as more motivated ($p<.01$), and they reported more involvement ($p<.05$) when their child was in a classroom where the teacher was a high, rather than low, user of school-to-home communications. Thus, there were significant differences in parents' beliefs and perceptions as a function of the teachers' reported use of school-to-home communications.

Insert Table 5 about here

Similar ANOVAs were then performed on measures of children's motivation (see Table 6). These results showed significant grade level effects on measures of intrinsic interest and the perceived level of parent involvement. The children in second grade rated their interest in learning and the involvement of their parents higher than children in the fourth grade. There were, however, no significant differences on the

child measures as a function of the teachers' self-reported use of communication practices.

Insert Table 6 about here

What was the relationship between the teacher and parent and child measures?

Tables 7 and 8 show the correlations between the teacher and parent and child measures for all classrooms when the parent and child data were aggregated to the classroom level. Using the entire sample ($n=32$), these correlations provide a picture of the relationship between teachers' communications, parents' beliefs and perceptions, and children's motivation. Table 7 shows the relationship between teachers' and parents' reports of specific communication practices. Among the different practices, positive and significant relationships were found between teachers' reported use of "classroom newsletters," "information about classroom activities," and "progress reports" and parents' reports of receiving these types of communications. A significant relationship between teachers' and parents' overall ratings of the communication practices suggests that when teachers sent these communications, parents attended to them, $r=.42$, $p<.05$ (see Table 8). These correlational findings showed reasonable consistency between teachers' and parents' reports.

Insert Tables 7 & 8 about here

Table 8 additionally shows the relationship between teachers' use of communications and other teacher, parent, and child measures. For example, teachers' self-reported use of school-to-home communications was significantly related to their own sense of efficacy ($r=.37$, $p<.05$). Although causality cannot be inferred, teachers may be more willing to invest in parent involvement practices when they believe that their efforts can increase children's abilities and learning. We additionally found that teachers' self-reported efficacy was significantly related to how parents evaluated the teacher ($r=.39$, $p<.05$). It is therefore also plausible that teachers may feel more efficacious when parents view them favorably. This set of correlations involving the efficacy variable may very well suggest a reciprocal relationship. A significant relationship was also found between teachers' use of communications and parents' evaluation of the teachers' effectiveness ($p<.05$). Teachers' use of communications, however, was not related to any of the child variables.

Correlation coefficients between the parent and child measures are shown in Table 9 and were computed using the individual as the unit of analysis. Since attitudes and actions are likely to depend on how an individual perceives and interprets information and behavior, the perspective of the individual parent is more relevant to the analyses. Parents' evaluations of the teacher were highly related to their perception of the teachers' communication practices ($r=.79, p<.001$). Parents' self-reported involvement was related to their evaluations of the school and teacher, perceptions of their child's motivation, and beliefs in their own ability to influence their child's academic success. Children's self-ratings of competence and motivation were significantly related to their perceptions of their parents' involvement ($r's=.41$ & $.35, p<.001$, respectively). There was, however, no correspondence between children's perceptions of their parents' involvement and parents' self-reports of their involvement ($r=.06$). Only the child's assessment of parent involvement was predictive of their self-reported intrinsic interest and self-evaluations of competence.

Insert Table 9 about here

This pattern of correlations points to the importance of assessing teachers' practices from the perspective of the parent when examining the relationship between teachers' parent involvement practices and parental beliefs and perceptions. How parents' evaluated the teacher and perceived their child was related to their own views of how well the teacher communicated with them. Moreover, children's motivation and self-competence was related to their own perceptions of their parents' involvement and not to parents' reports of their involvement. The discrepant view of parent and child is an issue that deserves more attention. Not only do we need to examine the amount of involvement from the child's perspective, we need to address the perceived quality of parental involvement in future work.

What processes mediate the impact of school-to-home communications on indices of parent involvement?

The effect of school-to-home communication on parent involvement was evidenced by a significant correlation coefficient of $.26 (p<.05)$ between these two variables. We also decided to examine the indirect effects of school-to-home communications on parent involvement through parents' perceptions and beliefs. Parents' perceptions of the quality and frequency of teachers' communications were expected to predict how parents perceived the school, their child, and their own sense of efficacy, which, in turn, were expected to predict parental level of involvement with their child's learning.

The parent variables in the causal system included parents' awareness of communication practices (COMM), perceived comfort with the school (COMFORT), perception of child's motivation (MOTIVATION), perceived influence on child (INFLUENCE), and parent involvement (INVOLVEMENT). The causal system was represented by a set of linear equations as:

$$\begin{aligned}(\text{COMFORT}) &= a_1 + b_1 (\text{COMM}) + e_1 \\(\text{INFLUENCE}) &= a_2 + b_2 (\text{COMM}) + e_2 \\(\text{MOTIVATION}) &= a_3 + b_3 (\text{COMM}) + e_3 \\(\text{INVOLVEMENT}) &= a_4 + b_4 (\text{COMFORT}) + b_5 (\text{INFLUENCE}) + \\&\quad b_6 (\text{MOTIVATION}) + e_4\end{aligned}$$

Since parents' perceptions and beliefs were assumed to be related to how each parent interprets and gives meaning to the teacher's communications, the individual parent was the unit of analysis for the estimation of path coefficients. The means and standard deviations for each variable and the correlations among the variables in the estimating sample are shown in Table 9.

The path coefficients were estimated by the SAS procedure CALIS (Covariance Analysis of Linear Structural Equations) using the LINEQS model specification. The estimated standardized path coefficients were positive and significant ($p < .05$) (see Figure 1). Based on these estimated standardized path coefficients, the combined indirect effect of communication practices on parent involvement through these processes was .089. These results revealed that when parents felt comfortable with the school, perceived their child as motivated, and believed they had influence on their child, their reported involvement with the child's learning was higher. These perceptions and beliefs were found to be stronger when parents understood and were knowledgeable about classroom learning, received reports of their child's progress and accomplishments, and felt like a partner in their child's learning.

Insert Figure 1 about here

Discussion

Considerable research has studied the relationship between teachers' efforts to involve parents and various indices of parent involvement, but to a great extent, this research has not addressed specific types of teacher's communication practices and the relationship of these communications to parental beliefs and perceptions. The findings

of the present study provide some insight into how parental perceptions and beliefs may be important links in teachers' efforts to involve parents in children's learning.

Do teachers' communication practices influence parent involvement? The findings related to the intervention, itself, showed considerable variance within the teacher group in their self-reported use of communication practices. As a consequence, there was no statistically significant difference between the intervention and control group teachers in their reported use of school-to-home communications. It may be that some teachers volunteered to participate in the intervention because, heretofore, they had done little in communicating with parents. Since we had no information on teachers' prior practices, we were not able to assess change over time or initial differences between the intervention and control groups.

The teachers' self-reports, however, did allow us to identify those teachers who were high or low users of these communication practices. When teachers were grouped according to their self-reported use of communications, striking differences were found between those who were self-professed high users versus low users of school-to-home communications. The teachers were asked about communications they sent home that informed parents about classroom learning activities, their child's strengths and improvement, and how to help children learn at home. High versus low use of these communication practices was related to how parents evaluated the teachers' effectiveness, perceived their child's motivation, and judged their own sense of efficacy in influencing their child's success. Teachers' communications were related to parents' reported frequency of talking to their child about school, monitoring their child's schoolwork, and helping their child learn, that is, their reported involvement in their child's learning. Our findings suggest that teachers' communications may impact parents' perceptions of their child and their own self-related beliefs in a way that may relate to a wide range of parenting strategies, including involvement in their child's learning.

What differentiates these teachers who are high users of communications to parents from those who communicate infrequently? Although we did not assess status characteristics such as years of teaching experience, our findings suggest that teachers' sense of efficacy may be an important contributing factor since parent involvement practices of all types require considerable additional effort. Others have reported a relationship between teachers' sense of efficacy and strength of school programs of parent involvement (e.g., Hoover-Dempsey, Bassler, & Brissie, 1987), suggesting that such programs may strengthen teachers' sense of efficacy. Our findings, however, suggest that teachers who believe their actions can make a difference in children's learning may actually take more initiative and use parent involvement practices, including direct communications to parents. Teachers with higher self-efficacy may be more likely to initiate and commit to parent involvement practices as a way to further enhance children's learning. Prior research has suggested that certain

attitudes may predict whether or not teachers engage in parent involvement practices; efficacy may be one predisposing attitude.

In this study, we identified a small set of process-related variables, but the findings suggest that variables such as these may prove to be important in understanding why parents do or do not become involved. Equally important will be further research which examines whether different patterns of relationships emerge as a function of SES of the family or grade level of the child. Our intent was to define specific types of communication practices and to begin to explore the relationship between these practices and parental beliefs, perceptions, and involvement. Clearly, these relationships may differ across different groups of parents and children. As part of the longitudinal project, we will examine how the pattern and nature of relationships differ among families.

The findings showed reasonable correspondence between the teachers' and parents' reports on the teachers' school-to-home communications. Parents' views of the teachers' communication practices, however, and not teachers' reports, proved to be the significant factor relating to parents' beliefs and perceptions. Obviously, parents' reports are more likely to reflect whether they actually received the communications, whether they attended to them, and how they interpreted them. Teachers' communication practices, therefore, can have differential impact on the parents of children depending first on the parents' attention and receptiveness to the communications (see Epstein & Dauber, 1991).

In this study, we identified process variables that might influence how parents relate to their child, support their child's learning, and involve themselves in their child's learning. We examined a path model where the quality of teachers' communication practices (i.e. as perceived by parents) was expected to predict parental beliefs and perceptions which, in turn, were expected to predict parent involvement. Because the empirical and conceptual literature that might suggest such a set of relationships is so limited, we selected three process variables represented by parents' view of the school, their child, and themselves. In this path model, we included teachers' communication practices from the parents' perspective since it is the parents' awareness and interpretation of these communications that is likely to impact how they think and behave. The path analysis suggested that these process variables may mediate the relationship between parents' attention to teachers' communications and their own self-reported level of involvement. The frequency or level of communications received by parents was related to their feelings of comfort with the school, their perceptions of their child's motivation, and their own belief that they could influence their child. These perceptions and beliefs, in turn, related to their reported level of involvement with their child's learning.

The positive relationship between parents' comfort with the school and involvement is consistent with prior research. However, we also found a positive relationship between parents' perceptions of their child and their involvement. At first glance, it might appear counter-intuitive to find parents' perceptions of children's motivation positively related to their involvement. On the one hand, we might expect that the parents may be more likely to become involved when they view their child as lacking motivation and confidence. Alternatively, however, parents may be more willing to become participants when they have a sense of hopefulness. That is, when parents believe their child is interested and believe they (the parent) can make a difference, they may become more involved. This interpretation has important implications because, quite often, communications from the teacher that attempt to solicit parent involvement convey negative information to the parent. Teachers often contact parents to tell them that their child is having trouble or is not motivated, expecting parents to volunteer assistance. Our findings suggest that such communications may not have the intended effect and may only discourage parents and make them feel less comfortable with the school and with their role as a helper. It is not that schools need to convince parents that their child is bright and doing well; instead, communications may need to focus parents on their child's progress and suggest to them that their child can learn and wants to learn. Parents' perceptions of their child as a motivated learner may then elicit a willingness to become involved.

However, there is another interpretation of the positive relationship between parents' perceptions of the child's motivation and their own involvement. It may well be that children who are interested in learning actually engage or involve their parents more. This explanation implies a different causal direction. Certainly our findings and the very limited research on this issue do not eliminate either hypothesis.

Of course, the above conclusions are based on findings that rely on parents' self-reported involvement with their child's learning. We also found that children's perceptions of their parents' involvement were not related to parents' self-reported involvement. Epstein (1986) has already suggested that teachers and parents often disagree as to whether parents are involved; our findings additionally show that the responses of parents and children are discrepant. The absence of a relationship between parents' reports of their own involvement and children's outcomes suggests the need for further study. Research by Grolnick and Ryan (1989; see also Grolnick, Ryan, & Deci, 1991), for example, suggests that children may perceive some parental behaviors as intrusive or controlling, rather than helpful. Parents' reports of their own level of involvement may not tap the quality of the involvement and the child's receptiveness to this involvement. As a consequence, the subjective viewpoint of the child becomes important in understanding the benefits of parent involvement.

Conclusion

The findings of the present study suggest that the frequency and content of school-to-home communications are important. When these communications contain information that may influence parents' perceptions of their child as a learner, when they give parents a sense of efficacy, and when they make the parents feel comfortable with the school, parent involvement may be enhanced.

More questions have been raised than answered by the present study. The potential mediating role of parents' beliefs and perceptions to parental involvement may be quite important, yet, to date, little research has focused on defining and studying these mediating processes. Prescriptions and policies for school-based programs on parent involvement have moved well ahead of our research base. We need to build a stronger research base that contributes to our understanding of how parental perceptions and beliefs are important variables in the parent involvement process. Moreover, we need further research on how different types of school-to-home communications, in particular, may facilitate parent involvement processes. The separate influences of school and home on children's motivation and learning have been well-studied, but the mutual influence of these overlapping "spheres" (Epstein, 1986) calls for our attention.

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Table 1
Three Categories of School-to-Home Communication

1. *Provide information about classroom learning.* Provide parents with information about classroom learning, for example, offer descriptions of classroom learning activities and units of study, instructional goals, specific objectives for a unit of study, classroom policies related to schoolwork and homework.

Intended purposes:

To increase parents' knowledge about classroom learning activities and the learning process itself, to enable parents to talk with their child about classroom activities, to enhance parents' interest in what their child is learning, and to encourage parents to communicate positive attitudes about what the child is learning.

Communication strategies:

Weekly classroom newsletters, parent visits to the classroom.

2. *Provide positive information about their child.* Give information related to their child's progress, improvement, positive qualities, and accomplishments; also help parents identify areas for improvement and how they can help their child achieve these goals.

Intended purposes:

To help parents recognize their child's positive qualities, accomplishments, progress, improvement, and effort; to assist parents in establishing positive expectations, standards, and learning goals; to encourage parents to monitor their child's schoolwork and homework, and to establish a trusting relationship between the teacher and parent.

Communication strategies:

Teacher-prepared notes and messages that contain positive information, folders of children's schoolwork with comments and invitations for two-way communication, telephone contact, conferences, home visits, teacher/parent/child contracts.

3. *Provide information for helping their child learn at home.* Invite parents to work with their child in learning activities, providing structure and direction. Parents need guidance for helping their child and must also be made to feel competent to help. Requests for their time and participation must be reasonable. The kind of parental assistance requested depends on the goals. Some children need extra learning time and more practice (review and remediation activities), some activities at home can enhance children's interests and learning (complementary or enrichment activities), and other activities can simply serve to foster parent and child dialogue on specific topics (discussion activities).

Intended purposes:

To provide extra learning time, to enhance children's interest in learning by involving parents in the process, to foster parent-child interaction around learning activities, and to extend and enrich children's learning by encouraging learning activities at home.

Communication strategies:

Ideas and tips for helping their child with assignments or activities, review and remediation activities, workshops or conferences designed to instruct parents on how to help, homework-help phone lines, demonstration tapes on how to assist the child, questions to ask the child about school.

Note. Adapted from Ames (1992)

Table 2

Comparison of Teachers' Communication Practices Between Intervention and Comparison Classrooms

(Teachers' Reports)

	<u>Intervention</u>	<u>Control</u>	
<u>Information Sent to Parents</u>	<u>M</u>	<u>M</u>	<u>F value</u>
1. Newsletters about children's learning	4.41	3.00	9.71**
2. Information about classroom activities	4.35	3.27	7.30*
3. Reports on child's progress	3.82	3.60	.81
4. Ideas for helping child learn	3.24	3.00	.41
5. Notes about child's accomplishments	3.59	3.47	.18
6. Folders of child's classwork	3.82	3.00	3.50
7. Home activities for parent and child	2.88	2.60	.74
8. Communication practices (combined score)	26.12	21.93	7.92**

Note: degrees of freedom for all effects = 1, 30* $p < .05$ ** $p < .01$

Table 3

Comparison of Teachers' Communication Practices Between Intervention and Comparison Classrooms
(Parent Reports)

	<u>Intervention Group</u>	<u>Control Group</u>	<u>F value</u>
	<u>M</u>	<u>M</u>	
<u>Information Rec'd</u>			
1. Newsletters about child's learning	4.46	4.14	3.88
2. Informed about learning activities	4.29	4.06	2.89
3. Reports on child's progress	4.20	4.02	1.62
4. Ideas for helping child learn	3.76	3.67	.48
5. Notes about child's accomplishments	4.12	4.06	.26
6. Treated like a partner in learning	4.05	3.94	.54
7. Asked me to help child learn	3.91	3.84	.24
8. Helped me understand her/his program	4.04	3.78	3.41
9. Comm. Practice (combined score)	32.83	31.50	1.74

Note: degrees of freedom for all effects = 1, 30

Table 4

Comparisons Between Teachers Reporting High vs Low Use of
Communication Practices (Teacher Measures)

<u>Type of Communication</u>	<u>High Use</u>	<u>Low Use</u>	<u>F Ratio</u>
1. Newsletter about children's learning	4.70	2.60	17.64**
2. Information about class activities	4.80	2.60	40.33**
3. Reports on child's progress	4.40	3.10	11.66**
4. Ideas for helping child learn	3.70	2.50	16.94**
5. Notes about child's accomplishments	4.10	2.90	13.09**
6. Folders of child's classwork	4.20	2.10	20.51**
7. Home activities for parent & child	3.40	2.20	12.52**
8. Communication practices (combined score)	29.30	18.00	171.40**

Note: degrees of freedom for all effects = 1, 18

* $p < .05$

** $p < .01$

Table 5

Comparison Between Teachers Reporting High and Low Use of
Communication Practices (Parent Measures)

<u>Scale</u>	<u>High Use</u>	<u>Low Use</u>	<u>F Ratio</u>
1. Awareness of communications	33.67	29.64	9.01**
2. Evaluation of teacher effectiveness	34.33	29.90	13.52**
3. Perceived comfort with school	4.44	4.38	.38
4. Perception of child's motivation	16.35	15.77	7.97**
5. Perceived influence on child	4.57	4.43	5.67*
6. Involvement with child's learning	12.34	11.73	5.42*

Note: degrees of freedom for all effects = 1, 18

* $p < .05$

** $p < .01$

Table 6

Comparison of Teachers Reporting High and Low Use of
School-to-Home Communications (Student Measures)

<u>Student Measure</u>	<u>F values</u>		
	<u>Grade</u>	<u>Use</u>	<u>Grade x Use</u>
Intrinsic interest	6.76*	3.54	.86
Cognitive competence	2.83	.62	2.27
Perceived parent involvement	6.31*	.22	1.26

Note: degrees of freedom for all effects = 1, 18

* $p < .05$

Table 7

Correlations Between Teachers' and Parents' Reports
Of Specific Communication Practices

1.	Classroom newsletters	.54**
2.	Information about classroom activities	.49**
3.	Progress reports	.45*
4.	Ideas to help children learn	.01
5.	Notes about accomplishments	.28

n = 32 classrooms

*p<.05

**p<.01

Table 8

Correlations, Means, and Standard Deviations Among Teacher, Parent,
and Child Measures (Classroom Level)

	Teacher Measures	
	<u>Communication Practices</u>	<u>Efficacy</u>
<u>Teacher Measures</u>		
1 Efficacy	.37*	--
<u>Parent Measures</u>		
2 Communications Rec'd	.42*	.29
3 Evaluation of Teacher	.36*	.39*
4 Perceived Comfort w/school	.05	.03
5 Perceived Motivation of Child	.02	.12
6 Perceived Influence	.23	.25
7 Involvement	.24	.07
<u>Child Measures</u>		
8 Perceived Involvement	-.07	.14
9 Intrinsic Interest	.18	.15
10 Perceived Competence	.10	.00
Means	24.16	14.53
Standard Deviations	4.71	2.87
<u>n</u> = 32 classrooms		
*p<.05		

Table 9
Correlations, Means, and Standard Deviations of Parent and Child Measures

Parent Measures	Parent Measures						Child Measures		
	1	2	3	4	5	6	7	8	9
1 Attn. to Teacher's Comm.	-								
2 Evaluation of Teacher	.74***	--							
3 Perceived Comfort	.28***	.32***	--						
4 Perceived Motivation of Child	.26***	.46***	.27***	--					
5 Perceived Influence	.13***	.19***	.22***	.34***	--				
6 Involvement	.26***	.24***	.18***	.22***	.32***	--			
<u>Child Measures</u>									
7 Perceived Parent Involvement	.02	.00	.00	.14	.01	.06	--		
8 Intrinsic Interest	.03	.10	-.04	.27***	-.01	.01	.41***	--	
9 Perceived Competence	.00	.07	.05	.30***	.08	.01	.35***	.51***	--
Means	31.76	32.34	4.39	16.20	4.52	12.07	15.16	17.23	15.80
Standard Deviation	7.05	6.92	.88	3.08	.65	1.94	2.57	2.66	2.04

Note: $n = 614$ for correlations between parent and child

$n = 659$ for correlations within parent measures

$n = 808$ for correlations within child measures

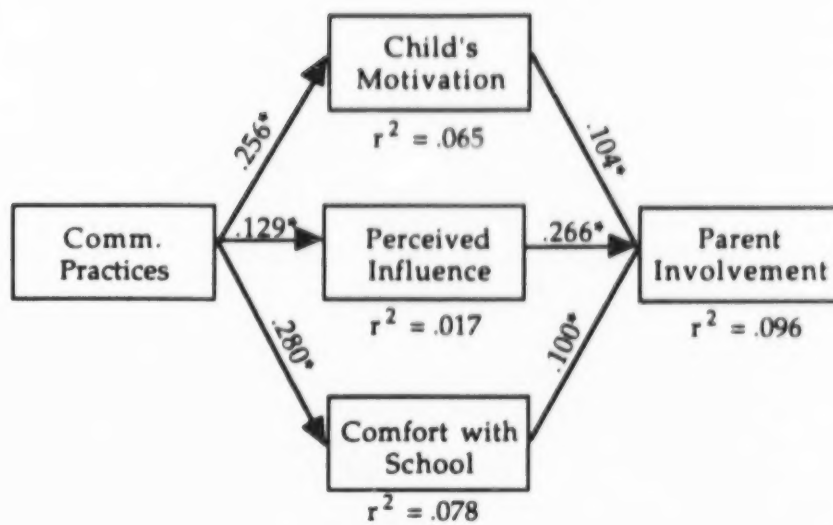


Figure 1. Estimated Standardized Coefficients for Linear Equation in the Path Model of Parent Involvement